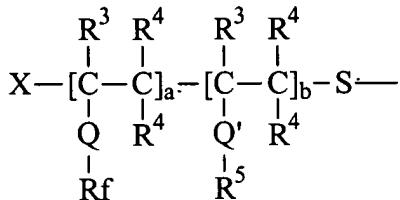


We claim:

1. A composition comprising
 - a) a fluorochemical oligomeric compound of the formula:

5 $(A-L^1)_n[R1-(L^2-R^2)_m]_p$, wherein

A is a fluorochemical oligomeric moiety of the formula



wherein the sum of a + b is an number such that the compound is oligomeric, and a is at least 1;

10 R^3 is hydrogen, halogen, or straight chain or branched chain alkyl containing 1 to about 4 carbon atoms;

each R^4 is independently hydrogen or straight chain or branched chain alkyl containing 1 to about 4 carbon atoms;

Q and Q' are each independently a covalent bond or an organic linking group,

15 R_f is a fluoroaliphatic group that comprises a fully fluorinated terminal group;

R^5 is a fluorine-free aliphatic group;

X is a hydrogen atom or a group derived from a free radical initiator;

L^1 and L^2 are independently divalent linking groups,

R^1 is the residue of an organic isocyanate,

20 R^2 is a hydrogen or an aliphatic group,

n is 1 to 4, m is 0 to 4, and p is 1 to 4,

wherein at least one of said R^2 and R^5 groups has 12 or more carbon atoms; and

- b) an antisoiling compound.

25 2. The composition of claim 1 wherein the ratio of a to b of said fluorochemical oligomer a), is at least 2:1.

3. The composition of claim 1, wherein R_f has the structure C_oF_{2o+1} , where o is 3 to 7.

4. The composition of claim 1, wherein each of L¹ and L² are derived from the reaction of a nucleophilic group with an isocyanate group.

5. The composition of claim 4 wherein L¹ and L² are independently selected from a ureylene, a urethanylbiuretylene, a guanidinylene and a carbodiimidylene.

6. The composition of claim 1 wherein a+b of said oligomeric moiety is 3 to 20.

10 7. The composition of claim 1 wherein the ratio of component a) to component b) is 1:20 to 20:1.

15 8. The composition of claim 1, wherein Q and Q' of said fluorochemical oligomer are independently selected from the following structures, wherein each k is independently an integer from 0 to about 20, R₁' is hydrogen, aryl, or alkyl of 1 to about 4 carbon atoms, and R₂' is alkyl of 1 to about 20 carbon atoms:

| | |
|--|--|
| -SO ₂ NR ₁ '(CH ₂) _k O(O)C- | -CONR ₁ '(CH ₂) _k O(O)C- |
| -(CH ₂) _k O(O)C- | -CH ₂ CH(OR ₂ ')CH ₂ O(O)C- |
| -(CH ₂) _k C(O)O- | -(CH ₂) _k SC(O)- |
| -(CH ₂) _k O(CH ₂) _k O(O)C- | -(CH ₂) _k S(CH ₂) _k O(O)C- |
| -(CH ₂) _k SO ₂ (CH ₂) _k O(O)C- | -(CH ₂) _k S(CH ₂) _k OC(O)- |
| -(CH ₂) _k SO ₂ NR ₁ '(CH ₂) _k O(O)C- | -(CH ₂) _k SO ₂ - |
| -SO ₂ NR ₁ '(CH ₂) _k O- | -SO ₂ NR ₁ '(CH ₂) _k - |
| -(CH ₂) _k O(CH ₂) _k C(O)O- | -(CH ₂) _k SO ₂ NR ₁ '(CH ₂) _k C(O)O- |
| -(CH ₂) _k SO ₂ (CH ₂) _k C(O)O- | -CONR ₁ '(CH ₂) _k C(O)O- |
| -(CH ₂) _k S(CH ₂) _k C(O)O- | -CH ₂ CH(OR ₂ ')CH ₂ C(O)O- |
| -SO ₂ NR ₁ '(CH ₂) _k C(O)O- | -(CH ₂) _k O- |
| -C _k H _{2k} -OC(O)NH- | -C _k H _{2k} -NR ₁ 'C(O)NH-, |
| -OC(O)NR'(CH ₂) _k - | -(CH ₂) _k NR ₁ '- and |
| -(CH ₂) _k NR ₁ 'C(O)O- | |

9. The composition of claim 1 wherein said R² group is an aliphatic group of 12 to 75 carbon atoms.

10. The composition of claim 1 wherein the sum of carbons atoms in said R² 5 and R⁵ groups is 12 to 100.

11. The composition of claim 1 wherein said antisoiling compound is selected from a methacrylic ester polymer, colloidal alumina, colloidal silica, a silsesquioxane, polyvinylpyrrolidone and a water-soluble condensation polymer comprising the reaction 10 product of formaldehyde and an amine.

12. The composition of claim 1 wherein said antisoiling compound comprises a water-insoluble addition polymers derived from a polymerizable ethylenically unsaturated monomer free of non-vinylic fluorine, the polymer having at least one major 15 transition temperature higher than about 25°C .

13. The composition of claim 1, where b of said fluorochemical oligomeric moiety is 0.

20 14. The composition of claim 1, wherein R¹ is the residue of an aliphatic or aromatic polyisocyanate.

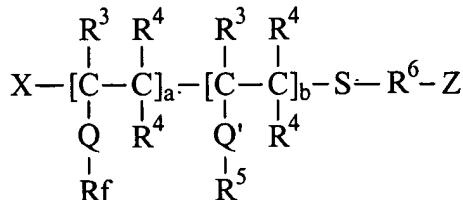
15. The composition of claim 1 wherein the ratio of component a) to component b) is 1:10 to 10:1.

25 16. The composition of claim 1, wherein said antisoiling (component b)) is selected from the group of (meth)acrylic ester (co)polymers, colloidal alumina, colloidal silica, silsesquioxanes, poly(vinylpyrrolidone) and styrene-maleic anhydride copolymers.

30 17. The composition of claim 16 wherein said antisoiling agent comprises ethyl methacrylate/methyl methacrylate copolymer.

18. The composition of claim 1, wherein said fluorochemical oligomeric component is the reaction product of

a) a fluorochemical oligomer of the formula



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wherein

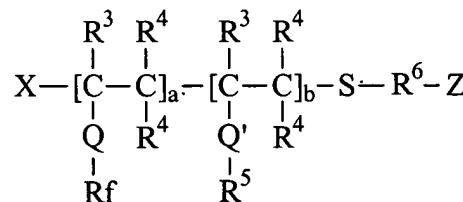
R^6 is an aliphatic or aromatic group and Z is an isocyanate-reactive group,

b) a isocyanate of the formula $\text{R}^1(\text{NCO})_x$, wherein x is 1 to 6, wherein R^1 is an aliphatic, alicyclic or aromatic group, and

10 c) an aliphatic compound of the formula $\text{R}^2-(\text{Z})_q$, where R^2 is a aliphatic group, Z is an isocyanate reactive group and q is 1 to 4.

19. The composition of claim 1, wherein said fluorochemical oligomeric component is the reaction product of

15 a) a fluorochemical oligomer of the formula



wherein

R^6 is an aliphatic or aromatic group,

R^5 is a non-fluorinated aliphatic group of 12 to 75 carbons atoms, and

20 Z is an isocyanate-reactive group, and

b) an isocyanate of the formula $\text{R}^1(\text{NCO})_x$, wherein x is 1 to 6, wherein R^1 is an aliphatic, alicyclic or aromatic group.

20. A coating composition comprising a mixture of:

25 a) a solvent; and

b) the composition of Claim 1.

21. The coating composition of claim 20 wherein said mixture comprises an aqueous solution, dispersion or suspension.

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22. The coating composition of claim 20 further comprising a surfactant.

23. The coating composition of claim 20 comprising 0.1 to 50 weight percent of said composition of claim 1.

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24. An article comprising:

a substrate having one or more surfaces; and

the fluorochemical composition of Claim 1 coated on one or more surfaces of said substrate.

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25. The article of Claim 24 wherein the substrate is a fibrous substrates.

26. A method of imparting repellency and antisoiling to a substrate, having one or more surfaces, comprising the steps of:

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applying the coating composition of claim 20 onto one or more surfaces of said substrate; and

curing the coating composition at ambient or elevated temperature.

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